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CLAIMS:

What is claimed is:

1. A method for determining parameters needed to
5 communicate with a remote node in a computer network, the
method comprising:
 compiling a queue-pair-number map, wherein the map
 associates unique queue pair numbers with services hosted by
 network nodes;
10 receiving a service request from a client;
 looking up the queue pair number associated to the
 requested service; and
 replying to the client, wherein the reply includes:
 the address of the node hosting the requested
15 service; and
 the queue pair number associated with the
 requested service.
2. The method according to claim 1, further comprising
20 registering the network nodes with a central server, wherein
the central server contains the queue-pair-number map.
3. The method according to claim 1, further comprising
25 initiating the network nodes with the queue-pair-number map.
4. The method according to claim 1, further comprising:
 receiving a second service request from the client,
 wherein the second request is addressed to the queue pair
 number included in the first reply;
30 associating a new queue pair number with a new dynamic
 instance of the requested service; and

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returning a second reply to the client, wherein the second reply includes the new queue pair number.

5. A method for determining parameters needed to
5 communicate with a remote node in a computer network, the method comprising:

associating a service hosted by the node with a
well-known queue pair number, wherein the well-known queue
pair number corresponds to at least one well-known port in
10 the node;

receiving a service request from a client, wherein the
request is addressed to the well-known queue pair number;
and

replying to the client, wherein the reply contains
15 attributes necessary for communication with the requested
service.

6. The method according to claim 5, wherein the well-known
queue pair number corresponds to all well-known ports in the
20 node.

7. The method according to claim 5, wherein the well-known
queue pair number corresponds to well-known ports which are
specified as the least used well-known ports in the node.
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8. The method according to claim 5, wherein the reply
returned to the client includes a new queue pair number
which differs from the well-known queue pair number, wherein
the new queue pair number is used by the client for
30 subsequent communication with the service.

9. A computer program product in a computer readable medium for use in a data processing system, for determining parameters needed to communicate with a remote node in a computer network, the computer program product comprising:

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        instructions for receiving a service request from a
client;

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instructions for replying to the client, wherein the
reply includes:

the queue pair number associated with the requested service.

11. The computer program product according to claim 9, further comprising instructions for initiating the network nodes with the queue-pair-number map.

instructions for receiving a second service request from the client, wherein the second request is addressed to the queue pair number included in the first reply;

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instructions for associating a new queue pair number
with a new dynamic instance of the requested service; and
instructions for returning a second reply to the
client, wherein the second reply includes the new queue pair
5 number.

13. A computer program product in a computer readable
medium for use in a data processing system, for determining
parameters needed to communicate with a remote node in a
10 computer network, the computer program product comprising:

instructions for associating a service hosted by the
node with a well-known queue pair number, wherein the
well-known queue pair number corresponds to at least one
well-known port in the node;

15 instructions for receiving a service request from a
client, wherein the request is addressed to the well-known
queue pair number; and

instructions for replying to the client, wherein the
reply contains attributes necessary for communication with
20 the requested service.

14. The computer program product according to claim 13,
wherein the well-known queue pair number corresponds to all
well-known ports in the node.

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15. The computer program product according to claim 13,
wherein the well-known queue pair number corresponds to
well-known ports which are specified as the least used
well-known ports in the node.

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16. The computer program product according to claim 13,
wherein the reply returned to the client includes a new

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queue pair number which differs from the well-known queue pair number, wherein the new queue pair number is used by the client for subsequent communication with the service.

- 5 17. A system for determining parameters needed to communicate with a remote node in a computer network, the system comprising:

10 a compiler which compiles a queue-pair-number map, wherein the map associates unique queue pair numbers with services hosted by network nodes;

a receiver which receives a service request from a client;

a look-up component which looks up the queue pair number mapped to the requested service; and

- 15 a response component which replies to the client, wherein the reply includes:

the address of the node hosting the requested service; and

- 20 the queue pair number associated with the requested service.

18. The system according to claim 17, further comprising:

25 a second receiver which receives a second service request from the client, wherein the second request is addressed to the queue pair number included in the first reply;

a processing component which associates a new queue pair number with a new dynamic instance of the requested service; and

- 30 a second response component which sends a second reply to the client, wherein the second reply includes the new queue pair number.
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19. A system for determining parameters needed to
communicate with a remote node in a computer network, the
5 system comprising:
- an associating component which associates a service
hosted by the node with a well-known queue pair number,
wherein the well-known queue pair number corresponds to at
least one well-known port in the node;
 - 10 a receiver which receives a service request from a
client, wherein the request is addressed to the well-known
queue pair number; and
 - a response component which sends a reply to the client,
wherein the reply contains attributes necessary for
15 communication with the requested service.

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